



# A collaboration designed to beat COVID-19

September 22, 2020

As COVID-19 began to spread throughout the United States, New Mexico's public health agencies, national laboratories and health care organizations were already strategizing ways to effectively stem the spread when it reached our state.

These collaborators — along with every New Mexican who followed their guidance by wearing face masks, practicing social distancing and minimizing outings — have helped New Mexico's cases remain low when neighboring states have experienced significant outbreaks. These efforts illustrate just how important working together is during a crisis.

One such example is the partnership between the New Mexico state government, Los Alamos National Laboratory and Presbyterian Healthcare Services to understand disease spread within the state, develop accurate disease forecasts, estimate demand on the health care system and allocate resources accordingly. During a time when so much was unknown, scientists, health officials and doctors put the available data to work for the benefit of our great state.

When early analysis by Los Alamos computer models predicted a significant increase in cases in northwestern New Mexico, Presbyterian then used its own modeling to identify available intensive care unit beds and personal protective equipment across the state, partnering with the state and other hospitals to arrange for transfers of patients to hospitals with the capacity to treat them.

The computer models also helped guide the state's planning to create isolated housing — such as hotels — where noncritical COVID-19 patients or those awaiting test results could live temporarily, away from family members. This is important in New Mexico, where multigenerational households number about 32,000, and it was critical to protect our most vulnerable residents. Since April, between 100 and 300 New Mexicans have occupied such facilities every day to help prevent the spread of the disease in their homes.

Other computer models developed at Los Alamos are helping the state decide the best path for reopening schools. These models look at potential learning scenarios — such as in-person school five days per week, hybrid online/in-person options, and online-only schooling — and assess the risk for increased cases.

Another approach tracks the vulnerability of certain geographical areas based on factors such as poverty, race/ethnicity, age and household size. By identifying communities at higher risk, the state can better coordinate interventions to stop the spread of COVID-19

that are specific to each community — such as deploying Presbyterian’s mobile-testing team to increase access to testing.

This collaboration also resulted in estimates of the person-to-person spread rate of COVID-19 in various regions of New Mexico, which has been used to assess the impact of social-distancing measures. This information helps state public health officials consider mitigations and educational campaigns targeted to specific geographical areas, as well as determine whether to relax existing social-distancing restrictions in other areas.

The strength in collaboration is evident: By bringing together experts from various specialties and with different perspectives so that scientifically based, data-driven assessments effectively support decision makers, our experience in New Mexico is vastly different than in many other states.

The rally of #AllTogetherNM wasn’t just for every New Mexican, but for health care organizations, national laboratories and public health offices. All three organizations have their own teams of experts and epidemiological models, which inform one another to ultimately improve the forecasts. By harnessing our various strengths and using scientific data to make informed decisions that help guide us, we have taken action against the spread of COVID-19 in our state.

New Mexicans have helped by adhering to the collaborative directions — and we are making progress. But we can’t stop now. We will continue to work on robust data-based guidance, and we thank you for doing your part as we collectively navigate our way through the pandemic together.

– *Thom Mason, Director of Los Alamos National Laboratory*

– *Jason Mitchell, Chief Medical Officer of Presbyterian Healthcare Services*

– *David R. Scrase, Secretary of New Mexico’s Human Services Department*

*This article first appeared in the Santa Fe New Mexican.*

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